Appl. No. 09/267,511   PATENT
Amdt. dated [insert date]
Reply to Office Action of June 10, 2004

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

1. (Currently amended) A method for reducing a condition associated with fetal alcohol syndrome in a fetus who is exposed to alcohol *in utero*, the method comprising administering to the fetus while *in utero* an activity dependent neurotrophic factor (ADNF) polypeptide in an amount sufficient to reduce the condition associated with fetal alcohol syndrome;

wherein the ADNF polypeptide is administered before alcohol exposure;

wherein the condition associated with fetal alcohol syndrome is selected from the group consisting of decreased body weight of the fetus, decreased brain weight of the fetus, decreased level of vasoactive intestinal peptide (VIP) mRNA of the fetus, and likelihood of death of the fetus *in utero*; and

wherein the ADNF polypeptide is a member selected from the group consisting of:

(a) an ADNF I polypeptide having the following amino acid sequence:

$(R^1)_x$-Ser-Ala-Leu-Leu-Arg-Ser-Ile-Pro-Ala-$(R^2)_y$ (SEQ ID NO:3);

(b) an ADNF III polypeptide having the following amino acid sequence:

$(R^3)_w$-Asn-Ala-Pro-Val-Ser-Ile-Pro-Gln-$(R^4)_z$ (SEQ ID NO:4);

(c) a mixture of the ADNF I polypeptide of part (a) and the ADNF III polypeptide of part (b);

wherein R^1, R^2, R^3, and R^4 are independently selected and are an amino acid sequence comprising from 1 to about 40 amino acids wherein each amino acid is independently selected; and

x, y, w, and z are independently selected and are equal to zero or one.

2-3. (Cancelled)

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2. ~~4.~~ (Previously presented) The method of claim 1, wherein for the ADNF I polypeptide x and y are both zero.

3. ~~5.~~ (Previously presented) The method of claim 1, wherein for the ADNF I polypeptide:

> x is one;
>
> R^1 is Val-Leu-Gly-Gly-Gly (SEQ ID NO:5); and
>
> y is zero.

4. ~~6.~~ (Previously presented) The method of claim 1, wherein for the ADNF I polypeptide:

> x is one;
>
> R^1 is Val-Glu-Glu-Gly-Ile-Val-Leu-Gly-Gly-Gly (SEQ ID NO:6);

and

> y is zero.

5. ~~7.~~ (Previously presented) The method of claim 1, wherein for the ADNF III polypeptide w and z are both zero.

6. ~~8.~~ (Previously presented) The method of claim 1, wherein for the ADNF III polypeptide:

> w is one;
>
> R^3 is Gly-Gly; and
>
> z is zero.

7. ~~9.~~ (Previously presented) The method of claim 1, wherein for the ADNF III polypeptide:

> w is one;
>
> R^3 is Leu-Gly-Gly;
>
> z is one; and
>
> R^4 is Gln-Ser.

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8 ~~10.~~ (Previously presented) The method of claim 1, wherein for the ADNF III polypeptide:

> w is one;
>
> R^3 is Leu-Gly-Leu-Gly-Gly (SEQ ID NO:7);
>
> z is one; and
>
> R^4 is Gln-Ser.

9 ~~11.~~ (Previously presented) The method of claim 1, wherein for the ADNF III polypeptide:

> w is one;
>
> R^3 is Ser-Val-Arg-Leu-Gly-Leu-Gly-Gly (SEQ ID NO:8);
>
> z is one; and
>
> R^4 is Gln-Ser.

10 ~~12.~~ (Previously presented) The method of claim 1, wherein the ADNF polypeptide is a mixture of ADNF I polypeptide of part (a) and the ADNF III polypeptide of part (b).

11 ~~13.~~ (Previously presented) The method of claim 1, wherein x, y, w, and z are all zero.

14. (Canceled)

12 ~~15.~~ (Previously presented) The method of claim 1, wherein the condition is a decreased body weight of the fetus.

13 ~~16.~~ (Previously presented) The method of claim 1, wherein the condition is a decreased brain weight of the fetus.

14 ~~17.~~ (Currently amended) The method of claim 1, wherein the condition is a decreased level of VIP mRNA of the ~~subject~~ fetus.

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15 ~~18.~~ (Previously presented) The method of claim 1, wherein the condition is likelihood of death of the fetus *in utero*.

19-44. (Canceled)

16 ~~45.~~ (Previously presented) The method of claim 1, wherein the ADNF polypeptide is a mixture of an ADNF I polypeptide consisting of SEQ ID NO:1 and an ADNF III polypeptide consisting of SEQ ID NO:2.